JUL 12
UNIV. OF MICH.

SCHOOL AND SOCIETY

EDITED BY J. McKEEN CATTELL

Volume XII | SATURDAY, JULY 10, 1920 | Number 289

CONTENTS

Education by Correspondence: L. L. BERNARD 31

Educational Service and Compensation: F. L. WELLS 38

Educational Events:

London Teachers' Salaries; Children leaving School for Work; Recreation for Teachers of the Hawaiian Islands; The Shortage of High-school Teachers 47

Educational Notes and News 50

Discussion and Correspondence:

The Dismissal of Professors at the University of Saskatchewan: WALTER MURRAY 53

Quotations:

Teachers in the English Secondary Schools 55

The Carnegie Foundation's Report on "The Professional Preparation of Teachers for American Public Schools." 56

Educational Research and Statistics:

Army Alpha Tests and Teachers' Estimates in Hollywood High School: MARY M. WENTWORTH 58

5.00 A YEAR | 15 CENTS A COPY | PUBLISHED WEEKLY

THE SCIENCE PRESS

LANCASTER, PA. GARRISON, N. Y.

Entered as second-class matter January 2, 1915, at the Post Office at Lancaster, Pa., under the Act of March 3, 1879

Recommended for Reading Circles

Two of the Recent Macmillan Books on Timely Educational Problems

MUNROE'S HUMAN FACTOR IN EDUCATION

The larger aspects of education that determine its usefulness to the community.

Professor Gordon of the University of Arizona calls this book "the sanest industrial philosophy of the twentieth century. While it is critical it is truly constructive and will have a wonderful influence in righting many wrongs which our indifference has permitted to creep in and grow into monstrosities, and which MUST BE CURBED. I expect to use the book in my courses in Social Ethics and Industrial Philosophy. I am glad that men of vision and ability are writing these short, but powerful constructive criticisms of the times."

POWERS' THE AMERICAN ERA

A highly interesting review of this book in SCHOOL AND HOME EDUCATION for May calls it "a masterpiece in its ability to demonstrate the individual American's privileged responsibility toward world welfare. . . . THE AMERICAN ERA makes a forceful and thorough analysis of conditions and principles that are in present conflict. With a sublime confidence that is typical of the best in American spirit Mr. Powers makes constructive suggestions for the future. . . . THE AMERICAN ERA is inspirational reading of a most practical kind."

Two Macmillan Books on Professional Subjects that have been Leaders on Reading Circle Lists this Year

DAVIS' THE WORK OF THE TEACHER

Adopted by State Teachers' Reading Circles in the following states:

MINNESOTA
MISSOURI
MONTANA
NORTH CAROLINA
OREGON

and in many counties in Pennsylvania.

FREELAND'S MODERN ELEMENTARY SCHOOL PRACTICE

Among its important State Teachers' Reading Circle adoptions are:

ARKANSAS
IOWA
MICHIGAN
SOUTH DAKOTA
TEXAS
NORTH CAROLINA

and Allegheny County, Pa., as well as many other counties and towns in Pennsylvania and in other states.

The Macmillan Company

New York **Boston** **Chicago**
Dallas **Atlanta** **San Francisco**

SCHOOL AND SOCIETY

Volume XII SATURDAY, JULY 10, 1920 Number 289

EDUCATION BY CORRESPONDENCE

A CONSIDERABLE and, I believe, unpartisan connection with university extension in general and correspondence instruction in particular leads me to offer some conclusions on the subject which may possibly be of interest to others. The great growth of instruction in this field in recent years is, of course, a part of the praiseworthy movement to extend the educational facilities of the state and of private corporations to as many people as will take advantage of them. The motives back of this type of extension, when carried on by state universities, are of two general types: (1) to make a wider and stronger appeal to the masses of the voters for support of the rapidly growing state universities, which must have more popular backing if they are to continue to compete with the great private institutions of learning, and (2) to offer as much first aid to a somewhat ailing democracy as is possible. Knowledge, especially knowledge of the ways in which people live together, knowledge of the technique of success and efficieney, of government and of society, are the brands of medicine which our doctors of sociology are now in the habit of prescribing for the masses of the fourth estate and of the middle classes who have so recently become our masters—and their own. Which is the stronger motive with our educational statesmen—a revivified democracy or a plenteous support for the universities—no explanation is here offered. No doubt there is variation here, as elsewhere. Nor does it greatly matter, in so far as concerns the problem of extension teaching. That is the problem we must meet.

The advantages of the method of correspondence teaching are obvious enough. But it should be remarked at the outset that they are not pedagogical. Only the most hardy enthusiast will claim so much, although it is sometimes so asserted. They are rather social and vocational-economic, if one prefers. The advantage most commonly urged is that the method permits the student to secure an education while working. This combination of work and study may be—is frequently—made by students studying in residence at some educational institution, but rarely with flattering success. The employer is usually a jealous master and the pay of the amateur—the service is frequently some form of manual labor—is so slight that the hours of labor encroach upon the minutes of study to such an extent that the record of the student suffers greatly, or his health is impaired, or discouragement sets in and a truce is called with ambition, the student not infrequently coming to believe that he lacks capacity and giving up his attempt to secure an education. Other students "get by," as the phrase is, in spite of their labor handicaps by playing upon the sympathies of their teachers or administrative officers, thus securing for themselves exceptional favors which will not be duplicated in the hard battle of life, in which they will be at a disadvantage because they did not fight the battle fairly and with self-respect while in college.

Correspondence study in the evening,

after the day's regular work is done, offers no such temptation to degeneration of moral fiber. It may overstrain health or discouragement may be an accompaniment, but all these things may be guarded against by regulating the pace. Even the grades may be kept up to a good average in spite of the handicaps of daily toil by making haste slowly. There is no class of toil-free and largely care-free competing students to set the pace and speed up tired nerves and fagged brain. One can work at his will, rest at his pleasure, and mull over interesting phases of his lessons to his heart's content—if there really are students who desire to do this—for his time and his rate of progress are at his own disposal. If the student is forced to relinquish the university or to remain at home for other reasons—such as illness of self or of others—the result is the same. Not all of the time need be lost nor need he sever himself entirely from habits of mental discipline. To the university student who is temporarily out of direct contact with his university, correspondence study is a real asset.

Scarcely less valuable is it to the teacher who desires to obtain a wider foundation and greater stimulus for her teaching work. The routine of teaching, especially in the small town and in out of the way places where there is little contact with others having the same intellectual experiences and interests, is a deadening thing. Most teachers succumb to it or mitigate the monotony of constant repetition and formal instruction by forgetting as far as possible their real work and living in the incidentals to it. They immerse themselves in parties, picnics, excursions, games, plays, tournaments, athletics, or some one or more of a score of cults, fads and diversions. They believe that they are a real asset to the community because they attract the community's attention and they become popular with their students and manage to escape from the ennui of monotonous teaching. Although there is truth in the saying that the best of education is not in books but in the incidentals of the schooling, one is inclined to think that much of the popularity of this phrase is not due to the real truth which lies back of this saying, but to the satisfyingness of one's rebound from the deadening sameness of much of the course of study. If one could keep this course of study fresh through new contacts with the field of knowledge and if the teacher could lead her pupils from the formal knowledge in books to the informal joys of search for truth in reading and discussion and in the whole field of fact and constructive discovery and comparison and generalization which lies outside of books, the greater truth of the incidental theory of education would have been achieved. In order that we may get away from the soul-cracking formalism of the classroom and books it is not so necessary that we turn from the discipline of intellectual study to the diversion of games as it is that we fulfill the promise of the book in its application to life and through the discovery of its meaning in life. If correspondence study can lead the teacher to a realization of this fact by stimulating her to find always something new, always a deeper and a more humane meaning in her subject, it will not only add to her own satisfaction in her work, but it will also make a great indirect contribution to the value and depth of education itself. And correspondence study, if properly selected and directed, can do that. Of course summer courses in the university or normal schools and occasional years off can accomplish the same end. These latter, however, come in somewhat concentrated form. The correspondence

course, because of its flexibility, may be made to cure the ill more nearly at the time when there is greatest need for it.

The more definitely vocational values of correspondence study scarcely need mention, for they are the ones which receive most emphasis. The commercial correspondence schools, as distinguished from the state university, advertise their wares especially from this viewpoint; and it is a perfectly legitimate one. Whatever makes one a better bookkeeper, electrician, stationary engineer or any other of some hundred or more of vocations taught by mail deserves to be encouraged. Even when the high schools and grammar schools have come into a proper development on their vocational and technical sides, giving training in the arts of self-support and the earning of a livelihood as well as in those conventions and illusions, literary and historic, which are currently supposed to represent the true culture, there will still be need for some source of such training which will reach those who have been isolated from schools of this character or who for other reasons have missed an adequate vocational adjustment to life's problems. Night schools, settlement classes, and the like will absorb much of this unfilled need, but perhaps will never meet the whole of it. However, it should not be forgotten that the vocational side of training is now the easiest side to make up through night classes when it has been missed or neglected. Often the supplementary facilities for vocational education of this sort are better developed than those, at least in the city, in the regular schools. It is also often the most difficult to acquire, especially when highly technical, through correspondence lessons.

Citizenship training is also slowly coming into its own in the schools, although it is to be wished that something broader and more fundamental and less dogmatic than is commonly indicated by "Americanization" teaching were meant by this term. A fundamental and first hand knowledge of social institutions is the best education in citizenship which any one can have, for nothing else can make a good citizen out of anybody. Of course, this knowledge can be obtained in many ways. Some homes are able to give it because the parents are trained and sympathetic. The community, church, Sunday-school, day school, clubs are all potential, if sometimes partial, sources of this training. And correspondence courses in economics, sociology, politics, history, the literature that is social rather than merely individualistic in its conceptions, may play their parts. Especially is this true for older and maturer minds who desire something which will open up to them a deeper vision of their function in life. The writer has found that a considerable percentage of those who register for correspondence courses in sociology and similar subjects are not doing so either with a view to university credit or as an aid in teaching. Some of them are persons—usually women—who have reached middle age or more and have begun to revise their youthful values regarding life and social contacts. Doubtless the coming of woman's suffrage and the shock of the great war have contributed considerably to this new interest.

The traditional cultural values of certain types of correspondence courses are sufficiently patent. Courses in English literature are especially prized by members of culture clubs. Languages are not infrequently studied for this reason, as well as courses in history and the social sciences. If it is not a frequent occurrence it is at least not an unknown happening for a

group of club women to enroll for a correspondence course in line with their year's program. To be sure, the scholastic mortality in courses thus registered for is very heavy, but after all the interest in the purely or traditionally cultural is as superficial as it is universal. It lacks the conviction and compulsion of the vocational or even the definite goals of a university degree or a specific equipment for a definite end or adjustment in life. The facilities for cultural improvement in the average community are usually slight indeed. "This town is dead," is one of the most common remarks which one hears outside of the large cities. Libraries are poor or lacking. There are few lectures and these are generally trivial to the last degree. The clubs are mainly of the pink tea and gossip type with a little reading from a selected author and vacuous or effusive comment thereon. The correspondence course, if properly organized and adapted to the needs of people of this sort and thus circumstanced, could meet a real social need. One difficulty in making connection here is that practically all correspondence courses are constructed from the standpoint of the needs of the university student out of residence or of the purely vocational student, and not of the person who has a general cultural interest in the field of knowledge. The old Chautauqua circle reading courses met this need better than anything else which has been invented, but even these have largely failed to secure a response in these days of the flood of literature and of newspaper matter which is not cultural but rather stupefying and enervating. Perhaps not even culture can survive the unholy alliance between the advertiser and the commercial publisher and the anesthetizing scribbler; it is almost certain that democracy will not be able to do so. Apparently one or the other must go.

Speaking of commercialization of literature, we should also be reminded of the commercialization of amusements. If correspondence study could do anything to wean those with intellectual tastes away from the commercialized perversions of recreation which now fill the theaters and make an overwhelming appeal for the surplus of our energies and time and which claim more and more of these as we gain more leisure from labor, through the shorter work-day, it would perform a most valuable social service. But, whatever other extension and related agencies may accomplish in this direction, correspondence study is not likely to have much to its credit. It lacks a compellingness of interest sufficient to enable it to compete with the carefully constructed commercial amusement appeals.

It must, of course, be recognized that the correspondence method of study and teaching is not equally applicable to all subjects. Languages and laboratory subjects offer the greatest difficulty, but various aids and substitutes for laboratory technique have been worked out here. The phonograph gives instruction in the pronounciation of a foreign language, and the loan of machines or other apparatus makes good some of the lacks of equipment in instruction in physics and chemistry. The microscope and a few simple tools and appliances do much for a course in biology and bacteriology. Music and art instruction offer similar, if not as extreme, difficulties. The lack of personal suggestion and guidance in mathematics and the mathematical applications of other sciences offers considerable difficulty, but with patience these limitations may be compensated for in a measure through multiplication of correspondence and the determination of the student. The

easiest of all subjects to teach by correspondence are perhaps the literatures and the mental and social sciences, for as yet these subjects, with the partial exception of psychology, are not taught by the experimental or laboratory methods. Their logical and interpretative or general character is in their favor here. And yet much of the values arising from personal contact and guidance by the teacher is lost even in connection with these subjects. It is now generally recognized that the social sciences are not properly taught unless the student is led to make a close and concrete connection between the theory of the text-book and the actual concrete life of the community, the industrial organization, or the state. Where correspondence study can also be connected with occasional extension lectures on the subject and the instructor is at stated intervals available to the students for question and answer, the method may be presumed to work best. But even here there are great difficulties, for the rate of procedure for different students varies so greatly that scarcely ever do two cover the same ground together or have the same backgrounds for their questions.

The difficulties which have to be guarded against and overcome, or at least mitigated, in correspondence study, even in those fields where instruction is easiest, are numerous and may well prove depressing. One of the most troublesome arises from the nature of the interest of the student. So often it is extrinsic rather than truly intrinsic. He may desire a few extra credits towards his university degree or he may expect more and quicker results in salary, if it be a vocational course, than it is possible for him to get. Some one may have inveigled him into taking the course when he really has no compelling interest in it. Such people are likely to react unfavorably to what we call fundamentals in a course. They want short cuts, entertainment and "results," despite the fact that the best course is usually supposed to be one which gives the widest training in the subject, which trains to think in the subject instead of merely prepares the person for a position or examination or the like.

Such students find it difficult to keep up a sustained interest in the work. Even at the best, when the student has enrolled in the course for its own sake, interest is likely to flag at times. It is difficult after a hard day's work to settle down for two or three hours of close reading and writing. Bodily or nervous fatigue and the lack of the stimulus of companionship, the absence of emulation, the remoteness of the reward, the slowness of the process, all tend to the discouragement of the feeble of will and the unimaginative and to encourage the postponement of the work to another day until the habit of application is greatly weakened or lost.

The absence of class discussion and of the stimulating interpretations and applicational excursions from the main theme by the teacher is among the most serious difficulties. Where there are other correspondence students within reach this can be somewhat compensated for. Especially is this true where the members of a club have taken up the course together, although there is serious danger here that some member, whose personality is more forceful than her knowledge is accurate, may so dominate the discussion and opinions of the group as to distort their thinking. This has been known to happen. The best substitute for class discussion and interpretation is wider reading. Where students can be induced to read extensively—and many of them can be—a more fundamental knowledge of the subject matter may be gained

by the correspondence student than is generally obtained by the student in residence. But almost invariably even the best of correspondence students will slip up on some important detail or basic fact because of lack of guidance, when in a class an opportune question put to the instructor and his answer, perhaps connected with reference to some apposite reading on the subject, would set the student right. This difficulty can be met in some degree by questions put to the instructor by correspondence and by copious marginal comments made by the conscientious instructor and by further references, which, unfortunately, are usually not available to the student or will not be read by the student.

The problem of getting the requisite reading matter to the student in reading courses is comparable to that of providing apparatus in laboratory courses. Outside of the large cities most local libraries are not provided with the required material. Small libraries are usually supplied only with popular and superficial literature, for the librarian must make a showing of circulation first and educate the public in fundamentals afterwards, if at all. Otherwise she can not justify the existence of the library and its grudged support to a public accustomed to count noses rather than weigh intellects. Perhaps the librarian herself has no higher standards. If the student must purchase all the reading material it will of necessity be limited. Courses are not much elected if they require equipment costing over five dollars, unless the financial returns from the study are great. There are ways of getting around this difficulty. Sometimes the state free library commission can be induced to provide package libraries on the subject for students in the course, but the library commission also justifies itself by statistics of circulation and will place its money where it totals highest. The true solution seems to lie in fostering the policy of having the correspondence department itself provide the reading equipment by adding a net rental charge to the fee for the instruction to those who care to avail themselves of the text-book service.

The question of how to present the lessons is perhaps the most difficult of all. The question of bibliography, introductory statements, directions of study, we may pass over because each subject has its own set of problems in these connections. But the problem of getting the right sorts of questions can not be hit upon by accident. The teacher must have insight and imagination in setting his problems. He must not go beyond the foundation preparation of his students, nor must he make his questions insipid. He must avoid asking questions which can be answered by merely turning to an appropriate topic heading in the text or readings, and yet he must not seek an answer that requires a degree of organization and constructive synthesis beyond the powers of his students. Even if he hits upon a good method in theory in this connection he is likely to find that the actual range of preparation and ability of his students varies so greatly that what is a good method for one is unsuited to another. If he escapes from what appears as vagueness at one point he is likely to approach insipidity at another. Perhaps in no other form of teaching is the problem method so applicable as in teaching by correspondence. In large measure it obviates many of the difficulties mentioned above and calls for a synthetic organization of the knowledge of the student about selected lines of thought. And yet it may be subject to serious dangers, more serious by correspondence than otherwise, if not supplemented

by other methods. The student's reading time may be so scattered over several days and his lack of concentration such that he finds it very difficult to focus the results of his reading upon the problem. Also he may feel that he is not making progress, that the exercises do not relate closely to the reading assignments. He is likely to wish to feel that he has "learned something," that he has made definite and quantitative associations. The problem method is likely to overtax the correspondence student's imagination and his interest in and loyalty to the course. Consequently he may be tempted to try the easier expedient of letting most of the reading go and solve the problems as best he can from slight reading and general information. In the end, if the course is not a farce, the student is lost in a maze of half-digested information and drops the course. The problem method must be supported by a sufficient number of direct questions to preserve in the student the sense of concrete accomplishment and reality.

But all these safeguards, if conscientiously applied by the instructor, may lead to an overelaboration of the lesson material. There is the case of one student who spent an average of eight hours in writing up her lessons in addition to a vast amount of time spent in reading, when the normal amount of time to the correspondence lesson was equal to that of two lessons in residence. This was an unusually conscientious student who sought to earn a high grade, but other students were found occasionally to spend considerably more time than this. On the other hand, many students send in lessons so brief and incomplete as to be practically worthless because they "do not wish to give more time to the work than the credit is worth." Ten or twelve questions, to the lesson, if they require thought and synthesis rather than the mere copying of answers from the text, may usually be considered as the limit for a reasonable assignment. But no adequate lesson can be properly covered by so few questions. Consequently the questions must be judiciously selected so as to be representative and also be cast in such form that it can not be easily perceived to what specific passage in the readings they refer. The temptation to assign short lessons in order that all parts may be covered by questions must be rigidly guarded against, if the standards of correspondence work are to be maintained. There is no type of instruction where there is greater need for long and carefully selected assignments, especially in what are called reading courses.

Where it is possible, the reading and questions should be made to stimulate the student to a supplementary study of local conditions, whether the course be in biology, business technique, history, or the social sciences. In some degree the illustrative material thus afforded will offset the lack of class discussion and will intensify the feeling of reality of the student for the course. In the case of the social sciences it also has the decided advantage of adding valuable citizenship training to the other aims of "laboratory practise" or "field work" and general cultural training. But such applications require much expenditure of time and must be carefully safeguarded as a consequence lest the student give up in despair.

Two other difficulties, which are primarily administrative, deserve consideration. If the instruction by correspondence be conscientiously given, as assumed above, if the needs of each student are considered individually and if the instructor encourages questions and is lavish with written comment and instruction, a great amount of

time must be spent on each student. No other type of instruction is so expensive of time and energy as is correspondence teaching when properly done. Form answers to questions and criticisms and comments written in the margins by teaching assistants with high-school training can never meet the real requirements of such instruction, although this method is pretty generally employed by the commercialized correspondence schools. Proper teaching of this sort then, involves a heavy cost. This cost has so far generally been hidden under the device of inducing university instructors to take on the work as an "extra" and to do it at odd times. In this way they do not really appreciate the amount of time they give to the task, nor at how small a wage they work. Some institutions employ graduate students to read the papers, thus adapting work done to a more normal rate of pay for the person concerned. Results would be much more satisfactory if instructors could be employed to give the whole of their time to the work, but at present rates of pay they could not earn enough for self-support in a normal day. Nor would the flow of lessons be sufficiently uniform to make a proper division of time possible. The heavy rush of correspondence work is in the summer and fall; the spring brings but little to do. Also there is a small amount of work in some departments and much in others, thus rendering it uneconomical to provide adequate specialization on a full-time basis in the teaching force. Yet the full-time basis would tend to eliminate one of the greatest administrative difficulties of correspondence teaching—the accumulation of unread papers in the hands of the instructor who makes this work secondary to his class teaching and who feels that he can afford to undertake it at a low rate of pay because he takes the time for it out of the day's work for which he has already been paid by the university. But it may well be questioned if even so he gains, when it is recalled that thus is spent much of the time that might go into study and research.

Correspondence study is at best but a makeshift, a substitute for class instruction; but it is a necessary substitute for many people and its value to the individual and the community in such cases undoubtedly justifies it. Its greatest present need is further standardization in procedure and administration.

L. L. Bernard
University of Minnesota

EDUCATIONAL SERVICE AND COMPENSATION

I. *Dislocation between Curricular and Life Requirements, with Special Reference to the Classics*

"And in a glas he hadde pigges bones." To-day these *relikes* are found not under glass, but on the leaves of text-books, where they have lost much of the money-getting virtue enjoyed by the bearer of the wallet. The distinctive offerings of the traditional curriculum are unlimited items for learning and many rules for their association, whose authority is fixed. Often, as in the classics, their value is equally conventional. The work of acquiring and practise in manipulating these conventional ideas are expected to impart accurate habits of thinking, respect for the right doing of things, and like desirable qualities. Formal discipline may be had from the classics as need not be argued, but they bear other things not so good, and there are elsewhere these same good things with others that the classics lack. Worth of content in the classics is hardly to be seen save as vaguely magni-

fied into "cultural values," "mental fertilizing," "linguistic architecture," through a haze of rationalization. Few facts are to most of lives so irrelevant as the forms of foreign language, "and him dead, too!" Is there more application for the series of *amnis, axis, buris, collis*, etc., or the relations of volt, watt, ampere, ohm? Is it nearer the test of action that "the only feminine is *arbor*," etc., or that hickory, dogwood, black birch, etc., are among the best firewoods? It is better to know the principal parts of ὁράω, ὄψομαι or of the eye itself? There is formal value in equal measure and content value in far greater measure in mathematics and the natural sciences. A wiser course is to give the beginner in physiology, chemistry or botany some of the ingenuity misapplied to drilling rules for gender in the third declension; to spare the waste of thought on simply formal values, and make easier the acquiring of workable facts.

Classical training is very present help in a spelling bee; assurance is also given that it helps in defining English words from its sources.[1] It may be remarked that the words cited are (obviously) needed by few, and that etymologies are not accurate guides to meanings, after semantic change has worked on them for centuries. *Sycophant, hierarchy, dynamo, symposium are examples.* The main point is to realize that definition and understanding are not mutually inclusive, and that the Anglo-Saxon term denotes the more important of the two. It comes not from reading "about" things, but working with them. Tomlinson could have defined education to the most captious of Devils.

I have had occasion to examine for this and other faculties, many persons with mental disturbance. Of all that makes up intelligence, this gives the smallest reflection of mental imbalance. Insignificant for the preservation of mind, it is the paradise of him whose intelligence is outstripped by his "education." Persons with judgment, emotion and conduct gone down wind keep as much of it as is needed by the reader of this. It stands the most conventional of all accomplishments, worth the least to mental health and normal relations with mankind.

Not only is the food value of "classical" study minimal in proportion to bulk, but its preservative of convention is subtle poison. The pupil can either accept what is given him or pretend to accept it. More or less courteous pretense comes from the little suggestible young person who mistakes not the "pigges bones," who sees that the emperor of the fairy tale wears a shirt only, but who for desired rewards and approbations, must testify to the richness of his robes. "With this," writes Adolf Meyer, "goes a tendency to develop false standards, habits of putting up a sham front of performance where the pupil is hardly doing more than serving time; a formal obedience and formal attention without any real interest and performance." To this "actual training in intellectual dishonesty" the disciplines of Latin and Greek are exquisitely calculated.

Worse is the acceptance of such teaching at its face value or at a premium. The interested boy can not study Cæsar as his father studies Elwell or Foster; he studies Cæsar as his father studies Osler or Trautwine. When he has learned that *utor, fruor, fungor, potior, vescor* and their compounds take the ablative, he finds it nearly as important as the right way to clean his teeth, and far less troublesome. Sequence of tenses is a more facile process

[1] Irland, F., "High Schools and Classics," *Atlantic Monthly*, July, 1919.

than sequence of crops. That *cadaver* is neuter becomes a vital fact as that the living are otherwise, not to say better understood. To distinguish the conventional and the real, the imaginary and the actual, is a faculty only developing in the child whose woolly dog is better than a live one, the boy who revels in wild Indian, the girl busied with dresses for her doll. Adults live in a world founded on reality; its perception is the faculty about which true education centers. Whatever disturbs this development is bad, and this is directly accomplished by the illusions of value that the conscientious pupil gets from the enthusiastic Latinist. Every rule of classic syntax teaches him that paper is gold, that faith is works, that gods are little fishes and that cabbages are kings.

The doctrine of formal discipline in general is a late survival of sympathetic magic. But the formal discipline of the classics has a peculiar detachment from reality. It invites "regression" in the psychopathologist's sense, from practical to less mordant, if yet more stubborn, facts of convention. Intellectual satisfactions got out of the classics, as from ideational disciplines generally, have a distinct selfish tendency. They are of a different order from pleasures derived through social contacts, in the give and take of normal competition for the instinctive satisfactions. They are a high level autoerotism. Autoerotism of all levels is said to be "all right if you do it with a good conscience." But a good conscience therein is evasion of both the chief material and ethical values.

II. *This Dislocation as a Remediable Factor in the Low Compensation of Teachers*

While the foregoing is written of the classics as such, they are also symbols of traditional education. Other details of dislocation between such teaching and life have found understanding criticism in the biological sciences.[2] The cause of the dislocation is that process, familiar in biology, of change in an organism's environment more rapid than its own evolution has equalled. It is asked if the teaching profession is going bankrupt. Since the beginning of life, organisms and institutions have gone bankrupt in the situation where teaching finds itself. Others have grown to higher forms through effective meeting of the change.

If teaching is threatened with bankruptcy, its chief creditor, society, may properly inquire into the sources of this condition. Bankruptcy in pocket is what looms the nearest. A recent article in SCHOOL AND SOCIETY by Mr. Jewell[3] clearly raises the underlying question of bankruptcy in character, in a manner very consistent with prevailing criticism from psychobiological sources.

Certain factors in low teachers' salaries, which are mentioned by Dr. Snedden,[4] are, in so far as they are governing, little susceptible to remedy. In any such discussion, the question of improvable service is also to be taken into careful account. Be a thing never so well taught, it is worth only what it gives to life. It is question-begging to say that good teaching consists in linking a subject up with life. Different subjects of training differ in value for life as night from day. If the school does not govern itself accordingly it deserves to go bankrupt, and higher sal-

[2] Jennings, H. S., Watson, J. B., Meyer, A., and Thomas, W. I., "Suggestions of Modern Science Concerning Education." Pp. 211. Macmillan. 1918.

[3] Jewell, J. R., "The Education of the Feelings." SCHOOL AND SOCIETY, 1920, 11, 151–160.

[4] Snedden, David, quoted by Sprowls, J. W., "On the Bankruptcy of the Teaching Profession." SCHOOL AND SOCIETY, 1920, 11, 156–60.

ary will no more save it than oxygen cures cancer. At a time of vigorous agitation for higher salaries, there are natural inhibitions to relating low ones to the value of what they buy. Yet here lies the optimistic outlook. Beyond the low teachers' salaries in modern society, lies remediable failure of educational service.

It was Big Tim Sullivan who said, "I help a man because he's hungry, not because he's good." But the conventional Athenian has some excuse for weariness of our pedagogical Aristides. Nobody considers it "worth more to mould dough for bread than to mould boys and girls into citizens, to hammer hot iron than to hammer ideals, to construct machines than to build character."[5] The question is in the delivery of the goods. It is greater to damn than to hang; but if the judge says "you be hanged," you *are* hanged (this *not* is of British origin). Does the mechanic work on ill-sorted material, with obsolete tools, and to make something nobody wants to buy? He works on selected material with up-to-date equipment, and his task is to make something which fills a known requirement. Give the teacher an even chance.

Everybody knows there is no social function greater than education—ought to be. Education "as is" does not perform this function, and the gift of heaven being notoriously purchaseable with money, a percentage of increased pay is offered in remedy. It is not claimed that the gift is purchased without money. But it is not bought with ten, twenty or a hundred per cent. that is not earned. The vision is not of an added per cent. a year, dole of however generous impulse. It is of a community exacting from its educational service the utmost that training can do for youth, and returning for such service what parents are ready enough to give that their children may live more abundantly.

[5] "Teachers Salaries and the Wages for Unskilled Labor," SCHOOL AND SOCIETY, 1920, 11, 176-177. Quoted from United States Monthly Labor Review.

III. *Three Common Factors of Life Chiefly Subject to Education*

No one should be a teacher who should not receive twice what he does to-day. But society may not pay for what it does not get. The good teacher can not to-day give a fair share of what is in him. The "magnificent public service" of salesmanship languishes in a second hand bookshop. Low salary is a sane enough rationalization for abandoning the work of a teacher. But is that not too often the escape from a vicious triangle bounded by limited opportunities of service as well as low salary, and discontent born of both?

If an honest man is the noblest work of God, he is a not unworthy object of man's endeavor. The *good personality*, the best personality possible to build on the inherent constitution, is the proper goal of educational effort. How such effort is best directed, depends on the essential characteristics of the good personality, the role of experience in determining these characteristics, and the part of this experience which it may properly be charged to education to provide.

The most intimate experience of good and bad personalities falls to the lot of the psychiatrist. The factors which underlie the good personality are easily understood by all. With negligible exceptions, every good personality is able to do service which will earn a living at the very least. Back of these activities lie the instincts for food and other trends of self-preservation, but while based on instincts, the essential means of their fulfilment must be learned. Every good personality is (1) happily

married, (2) unhappily but few others know it, (3) unmarried and maintaining himself in this condition without injury to himself or to society. These adjustments are again based on instincts, and the rôle of experience in their fulfilment is essential. Every good personality keeps out of jail, establishes various systematic relations with his fellows through business organizations, societies and the like, and manifests good measure of what Thorndike has called "social intelligence,"[6] and Trotter founds on the herd "instinct." Whatever the instinctive bases here, the essential rôle of experience will not be disputed.

Beyond these limits people achieve themselves in various ways. There are many philosophies of life, but to this distance all non-pathological ones go in common. The first business of education is to secure these "initial common paths." This is the instinctive basis of education postulated alike by Mr. Jewell and by the psychobiologists. The governing function of education is the development of these fundamental instincts. Education that supports them is good, education that sidesteps them is wasted, education that perverts them is vicious.

IV. *Relation of the School to These*

Such perversity has been conspicuous in the attitude towards "vocational" education. The existence of the term is a reproach to the society that produced it. Economic prudishness, yet more than sexual, distorts the proper function of the school. I know a graduate of a first-class New England college and doctor of philosophy whose first intimation that he would ever have to earn his own living came when he wanted to get married. It seems necessary to voice the tautology that the human struggle for existence is based on making a living. It is impossible that there should be any motive more fit to govern education than this. Discipline of the instincts for self-maintenance is the chief responsibility of schooling. It does not begin and end with giving courses in ways to make a living, but in a reshaping of educational ideals.

> The purpose of these courses is to give clear notions of good workmanship, accurate and systematic knowledge of the fundamental processes common to many industries, and keen appreciation of the importance of mechanical activities and the value of mechanical intelligence. This training, coupled with thorough instruction in related academic subjects . . . tends to develop the qualities needed for leadership in many positions that offer great promise of successful careers.[7]

The endeavor is apparent to make education the ally of normal aspirations instead of their enemy. But at large, as the progressive teacher can himself best point out, their friendship is still quite "newe to bigynne."

Temperance propaganda unearthed an exhortation to liquor dealers to "create appetites" by giving drinks to children, the alcohol thus cast upon the waters of youth to return in dimes and quarters from maturity. Mr. Curtis finds this *monstrum horrendum* of iniquity in academic circles where the "value of the undergraduate teacher is measured by the number of men he sends into his subject."[8] Such a teacher has one particular resemblance to the conventional Indian. His institution exists not to make well-balanced men, but to sell them salted careers. Education which does this is not a producer of producers but a bucketshop

[6] Thorndike, E. L., "Measuring Human Intelligence," *Harpers Magazine*, 1920, 140, 227–235.

[7] *Bulletin of the Mechanic Arts High School*, Boston, Mass., June, 1919.

[8] Curtis, Winterton C., "The Recruiting of the College and University Profession," SCHOOL AND SOCIETY, 1920, 11, 14–18.

of souls. "And then they switch 'em into curb stocks." It is well known that people no longer sell themselves to the devil. They pay him to take them; but generally get better transport than the teacher enjoys.

Since the rationalization of liberal culture is much used against bread and butter learning (Give us the luxuries of life, and we will dispense with the necessities), it may be observed that "cultural" values lie not in a study itself but in an attitude developed in the personality. It is easy to exaggerate the rôle of formal education in cultural interests. They grow well in response to contacts of ordinary life. I see them exquisitely developed in men of no special schooling, with healthier content than such schooling would have been likely to give them.

The importance of sexual adjustments to the personality is hard to overestimate, but this is a responsibility of which the school should not bear the greater part. The need for individualization is greater than the schools can be expected to meet. The vesting of authority in this subject elsewhere than in the parents is not favorable to filial affection and confidence. If parents are to be educated not to shirk this responsibility, the school must not bear it for them. The family situation is this respect is so absurd that schools have not discreditably thought they ought to do something. But they have heavy enough burdens unborne without assuming one that rightly belongs elsewhere.

Thus in respect to economic training the opportunity of the school is great and beginning to be realized. In respect to sex training the opportunity of the school is smaller though hardly to be thought of as rightly met. There remains the share of the school in the training of social intelligence.

Much of this training is unsystematic and comes through the trial and error adjustments which the child makes to his equals. The school is an indirect source of a good deal of this experience. It associates young people in numerous extra-curricular activities from track athletics to journalism. Most types of adult work are here to be practised in the form of "supervised play" or in the more serious pursuit of paying one's way through school.

Under favorable circumstances the school accomplishes a good deal in this direction. The not too small boarding school, with traditional esprit de corps, well financed and well officered, does not leave much to be desired as an opportunity for social discipline. Under these conditions the instructors are actually "officers" rather than teachers, more valuable for the moral influence of their personalities than as sources of academic information. The same is true of a good college, and plays its part in justifying the higher compensation it offers.

The class-room (not the laboratory or shop) has to meet the difficulty of being as such an antithesis of life. It is a discipline of passivity. Unless this is offset by some very positive contribution to the personality, hours in the class-room are a debit to the account of education. A good school makes up in outside activities what may be lost in the class-room. But the teacher's share in them is very indirect. With the character-building features of school life most teachers can now have little to do. It is not surprising if they do not enter greatly into the compensation of the teacher.

The school gives an undoubted opportunity for young people to acquire social intelligence for themselves. This is excellent but it is not teaching, and the teach-

er's situation does not benefit thereby. Outside activities have, however, one weakness as an educational force. They depend on the spontaneity of the students. This means that their discipline is apt to reach the student in inverse ratio to the need for it. The specializing tendency in athletics is an example. Developed social intelligences flourish; inferior ones atrophy. Here is another field in whose cultivation teaching (*i. e.*, educational direction) may greatly increase its value. Remember the "high-salaried" teachers paid to develop that not unimportant factor in social intelligence, "manners."[9] The opportunity is of the same order as in the economic field, and in education all opportunities are responsibilities.

V. *Features of Education Based on Instincts*

The traditional tendency of schooling is not in any of these primally important directions. The human asset to which it is chiefly related is "abstract intelligence." The correlation of this quality with mental *balance* is exceedingly variable.[10] An experienced psychiatrist has voiced to me the belief that in sum it is negative. The quality is itself little dependent on formal education for development along socially effective lines.

Brief discussion may be offered of what is likely to be done if the teaching profession does go into bankruptcy, and psychobiological sciences are appointed to receivership. Objectives of the ensuing policy have already been outlined. Details of the approaching paths belong with little question to the educational specialist. Between these two lie some general directions already clear enough to formulate.

Introduction of the child into the environment of other children that the school creates, seldom begins too early. It means a good start in social adaptation, and is the more desirable, the fewer children there are in the home surroundings. Jennings[11] regards the importance of the early years as deserving the best paid supervision in the entire system.

In the circumstances under discussion, school education centers largely about taking useful part in the world's work. With exceptions important individually but negligible in the mass, this involves some sort of bodily skill. The foundation of these skills is laid as soon as the child comes to school, if an intelligent home has not already begun it. Formal methods of "hand training" are well developed, and accessible to every teacher. Whether physical training should have "academic" credit[12] needs no second asking of the psychobiologist. The shoe belongs nearer the other foot.

How soon the results of "hand training" or of psychomotor coordinations in general can be specialized into activities of immediate value, is not judged here. The abstract intelligence required for most life activities is reached at fourteen, and there is good reason to expect that motor skills can be developed in similar degree. Circumstances favor the brief and frequent practise periods whose efficacy Watson has demonstrated.[13] At the completion of junior grades the school has laid in the

[9] Jewell, J. R., "The Education of the Feelings," SCHOOL AND SOCIETY, 1920, 11, 154.

[10] Wells, F. L., "Intelligence and Psychosis," *Amer. Journal of Insanity*, July, 1920. In press.

[11] Jennings, H. S., et al., "Suggestions of Modern Science Concerning Education." Macmillan, 1918, p. 75.

[12] Holmes, P. K., "Is Physical Education Worthy of Academic Credit?" SCHOOL AND SOCIETY, 1920, 11, 160–164.

[13] Watson, J. B., "Psychology from the Standpoint of a Behaviorist." Lippincott, 1919, 386–388.

young individual a good foundation for economic self-maintenance. Very superior skills and occasionally superb ones are to be developed by training continued for four further years.

The following is an estimate by competent authority, of the minimum "mental age" required for the supervised performance of various institutional duties by the defective, who may of course be otherwise much ahead of the their "mental age":[14]

Bakeshop, general	7
Bakeshop, mixing dough	9
Basketry	7[15]
Benchwork, carpentry	8
Benchwork, simple	6
Board, lacing	4
Board, peg	3
Boiler house, helper	7
Box, sorting, letters	5[16]
Braid work, coire	8
Brushes, making	8
Buttoning, strips	4
Buttons, colored, stringing	3
Cloth, cutting in strips	3
Crocheting	5
Embroidery	9
Farming, plow, harrow, cultivator, single team	7
Farming, hoeing, difficult	8
Farming, hoeing, simple	6
Farming, milking	8
Farming, mowing machine	9
Farming, vegetable picking, difficult, double team	8
Farming, vegetable picking, simple	6
Glazing	10
Hammer, on block, to time	3
Housekeeping, floor polisher	2
Housekeeping, sweeping	5
Housekeeping, bedmaking	5[15]
Knitting, hand, difficult, machines	9
Knitting, hand, simple	5
Knitting, spool	4
Lacemaking	8
Mason, helper	8
Meat shop, cutter, weighing helper	8
Molds, button, stringing	2
Nets, making	7
Painting, supervised	8
Paper, cutting on line	3
Papers, put in boxes	2
Pins, in pattern	4
Pottery	8[15]
Printing	9
Ribbon, colored, braiding	3
Rocks, piling	3
Rocks, sorting	4
Rugs, brush, coarse	6
Rugs, hooked	6
Sandpapering	4
Scrapbook, cutting	5
Scrapbook, pasting	6
Scrapbook, assembling stories	9
Seating, cane (Blind)	8
Sawing, to line	6
Sewing, finishing, difficult	9[15]
Sewing, machine stitching, hemming	7
Sewing, kindergarten cards	4
Sewing, cloth strips together	3[15]
Shoes, repairing, difficult	8
Shoes, repairing, simple	6
Sloyd	5[16]
Spools, stringing	3
Steamfitting, helper	7
Top, hand, spinning	3
Toys, wooden, putting in box	2
Weaving, frame, simplest	3[16]
Weaving, loom, simplest	4
Weaving, simple	5[15]
Weaving, pattern	8[16]
Weaving, shoestring	4
Woodwork, puzzles	8[15]

[14] For these data I am indebted to the Massachusetts School for Feebleminded, especially to Dr. Raymond.

The higher types of skills to be acquired would be governed to some extent by individual inclinations, also varied in different institutions and perhaps in different years, with a view to keeping a proportioned supply of different types of skills.

There will naturally be some persons already competent at the industrial level, who are turned towards more intellectual life activities that require longer training periods. These may be intimately connected with motor skills, as in surgery, or more remotely, as in the law. In all these

[15] With specially good motor training.

[16] 9 physically.

cases early acquired motor skills develop into the healthiest type of balancing activity and pleasurable avocation through later years.

It has already been said that the school must not usurp the function of the parent in sex education. Parents sometimes resent such school interference as a kind of mental seduction. But if a child gives evidence of difficulties in this sphere, which parents, having it brought to their attention, are unable to manage, the school may have to proceed *in loco parentis*. The competence of the average school teacher to do this is not generally conceded in psychiatry.[17] There is room to develop such competence in the training of teachers, and the present neglect of it is only a phase of that failure of educational service which is a thesis of these remarks.[18]

Some early help the school may have to give individually. The chief responsibility of the school in sex education is in the higher institutions, where those of maturing minds may be led to properly assume these responsibilities to future children. It does not seem that group education in this sphere belongs before second or third year high school. Leading physiological and pathological facts may then be presented, not as though they were being heard about for the first time. In college this matter finds its right place in the course described by Macfie Campbell,[19] where more stress can be laid on the mental side. The individuals thus reached are few though relatively important. The school does not undertake to generalize this training. It is offered as a significant advantage of higher education.

Social intelligence has not generally been treated as a subject for formal training. It does not readily lend itself to a conception of education as knowledge. That there are surroundings which develop it is certain. There is some agreement that the recent demands of military service have brought out a large part of these qualities. The officers' training camp embodies intensive effort in this direction.

Clear definition and enforcement of responsibility is a leading contribution of military discipline to social intelligence. In this respect the duty of the home is not less than that of the school, but the child may be allowed to shirk at home, and the school supplies an important environment which can not be shirked. Greater emphasis in school work upon tasks whose performance can be closely checked, and which carry immediate rewards and penalties, is a way to higher educational values in this sphere.

Meyer[20] describes a school routine in which a third of the time in the classroom yielded about three times the normal expectation of academic result. The time thus saved is spent in "supervised play." Play is activity in which instinct finds direct expression; work is properly directed towards better fulfilment for instincts of a future day. There are children whose play is at their books and whose work is on the playground. Supervised play must look to it that this latter is not shirked.

[17] Campbell, C. M., "The Responsibility of the Universities in Promoting Mental Hygiene," *Mental Hygiene*, 1919, 3, 199–209.

[18] This much of general counsel. Do not think that information is education in sex any more than in the rest of life. Avoid sex "instruction" that is rather psychic exhibitionism. Mental attitude is the important thing. The danger of flippancy is not greater than that of over-emotionalizing. Inspire, by showing, a frank rational outlook. Be careful not to destroy confidence by misstatements of facts in the interest of convention.

[19] Campbell, C. M., *op. cit.*

[20] Meyer, A., et al., "Suggestions of Modern Science Concerning Education," Macmillan, 1918, pp. 140–141. *Cf.* also Curtis, H. S., in SCHOOL AND SOCIETY, 1920, 11, p. 439.

and that more or less shut-in personalities are trained to normal play. Authority is sometimes necessary for this purpose. There are some forms of play which no adolescent for whom the school is responsible should escape. Light athletic competitions are among them ("good loser"). Other play accomplishments come through normal contacts and are useful in maintaining them. Dancing and swimming are examples. The school will see that these are present.

Success in life involves responsibility not only for one's own conduct, but also for that of others in some degree. The school will help develop this important sense of responsibility for others' conduct as well as for one's own. In supervised play this is accomplished by investing the various young people with a brief and conventional authority (executive, not as a "monitor"), as the members of a squad of cadets take turns in commanding its military evolutions. Neither is this without value for those who are subjected to such conventional discipline.

Within recent years, organizations have developed whose aim is, in effect, to supply the school's deficiencies in mechanical and social training. Above the three r's, the Boy Scout program is worth very much more than traditional curriculum. The "scout" organizations work under organic and material disadvantages, and if their accomplishment at times falls farther from their ideal, it has also farther to fall. These organizations offer many detail suggestions for a constructive program, and a psychobiological direction of education would naturally seek to make their work an essential part of the educational system.

If Mr. Stowe's [21] remarks are a satire on education, it is perhaps too well concealed. What Mr. Stowe suggests, governing production policy by the cost of production, and producing what costs the least, is what a manufacturer does who sets out to produce filling for the scrap-heap. Similar policy in education tends to similar result. Manufacturing or education that seeks profit through service produces quality goods and lets them cost what they will provided they are worth so much the more to society.

Teachers should have twice as much, but their work should be worth many times as much. Measure the worth of teaching by what it gives, not by what it takes. Do not hide behind "not to make a living but to live" with something that does neither. Do not feed the tree of life with insect powder on the leaves. This life is also fed at the roots, the instincts. When education takes up the burden of their fulfilment, those who can will both teach and do.

F. L. WELLS

McLEAN HOSPITAL,
WAVERLEY, MASS.

[21] Stowe, A. Monroe, "Instructional Cost Accounting in a Municipal University," SCHOOL AND SOCIETY, 1920, 11, 327–329.

EDUCATIONAL EVENTS

LONDON TEACHERS' SALARIES

AT a special meeting of the London County Council Education Committee held on June 9 the Teaching Staff Sub-Committee submitted its report on the Burnham Salary Scale as applied to the London service. The outlines of the scheme as it affects head and assistant teachers in ordinary schools are reported in *The Times Educational Supplement*.

The three grades of central schools are retained on the same basis as formerly, under 200, 201 to 400, and over 400, and, unlike ordinary schools, fluctuations in average attendance are to have no effect upon these. As before, there will be the same minimum salary for each grade: headmasters receiving £525, rising by £25 increments to £625, £675 and £725 respectively. Headmistresses are to have in each case four fifths of these amounts. For

assistant masters there is provided a promotion increment of £25, rising to £450, with corresponding sums for mistresses of £20 and £360, whilst heads of departments are to have a promotion increment of £30, with a maximum of £480 for masters with £25 and £385 for mistresses. In all these cases the unusual increment of £12 10s. obtains.

In demonstration schools, assistant teachers, whether men or women, will receive £12 10s. above the salary of those in ordinary schools and will carry this beyond the maximum. There is no provision for special payments to head teachers of these schools.

Handicraft instructors will obtain an improved scale, rising from £225 to £375 by £12 10s., whilst assistants will go from £175 to £300 by the same increments; an important concession is that any who qualify for recognition as certified masters will be placed upon their scale. These recommendations are provisionally subject to the decisions of the Burnham Committee.

Certificated supply teachers and supply instructors of domestic economy are to be paid for the first time on a graduated scale recognizing years of certified service, arranged in five grades, of under 5, 10, 13 and 18 years, and over 18 years respectively, the men rising from 18s. 5d. to 39s. 2d. per day, the women from 17s. 3d. to 31s. 4d. per day; the present rates are fixed at 16s. 10d. men and 15s. 5d. women.

Head teachers of day special schools will be graded with two rooms as Grade 1, three-four rooms as Grade 2, five-nine rooms as Grade 3, and over ten rooms as Grade 4, and will be paid the salaries pertaining to these grades of ordinary schools.

The question of the grading of schools on the new basis gives rise to some detailed provisions, the most notable of which are that the grades of ordinary elementary schools shall be revised annually, the revision being based on the average attendance for the previous three years in senior departments and four years in infant departments. These will be regarded as full if the average attendance in any one of those three or four years, when increased by one fifth or one fourth respectively, reaches the minimum accommodation of the grade. The decrease in attendance owing to serious infectious illness, air raids and school journeys will be taken into account when thus estimating average attendance.

It is proposed to adjust the anomalies arising in connection with the regarding of schools between 340-400 (on the 40-48 basis) by placing such schools in Grade 4 of the new scale whilst they remain under the existing head teachers, provided that these, if under 55 years of age on April 1, 1920, shall accept transfer to the first suitable vacancy arising in a department of the appropriate grade. Further provisions allow for the raising of grade immediately the accommodation of a school is sufficiently increased; that where schools are reduced in grade the head teachers shall continue to receive increments to their original maximum; and that in calculating previous service months will be taken into account as well as whole years.

A supplementary estimate is involved for 1920–21 of £1,665,000, which, when added to the various awards, bonuses and scales previously granted during the war, gives a total expenditure on salaries in elementary schools for the year of £3,752,000 above that for 1914. Including these supplementary estimates the total cost of elementary education for 1920–21 is expected to reach £9,590,294, of which amount £7,128,885, or 63.3 per cent., will be expended upon salaries.

CHILDREN LEAVING SCHOOL FOR WORK

AN army of over 1,000,000 children between 14 and 16 years old, says the Children's Bureau of the U. S. Department of Labor, marches out of the schools each year to become wage earners. In a pamphlet entitled "Advising children in their choice of occupation and supervising the working child" the Bureau tells what happens to these children and offers suggestions for helping them get the proper start in life.

Only a few children, according to the pamphlet, receive any help from their parents in finding suitable openings because parents

do not know what opportunities are open to boys and girls, how to go about finding them, or what is the best thing for a child to do. The children begin an aimless search, making the rounds of factories, shops and offices and answering advertisements. More than nine tenths of them go into "blind-alley" jobs that require no skill and offer no opportunity to get ahead. Many drift from job to job, and become incapable of steady work. Some find work for which they are physically unfitted, sometimes to the permanent injury of their health. Some are without any employment for a time, since in many states the law does not require a child under sixteen to have a job before he is excused from school.

These conditions, the bulletin points out, call for some organization in the schools, or in connection with the schools, to tell children what and where the jobs are, and what training and ability are required to fill them. While most vocational guidance and placement work in this country has been started by private organizations, it has been taken over in a number of cities by the schools. England's experience with her juvenile-labor exchanges shows that the most successful work is done in close cooperation with the school. In Austria where vocational guidance is now receiving special attention a careful study is being made of how to link up the work with the school system.

In school placement bureaus the child applying for work may be reached before leaving school and in many cases persuaded to remain, or provided with a scholarship to enable him to do so. In one city from 25 to 30 per cent. of the children who come to the placement bureau are returned to school. The placement bureau in this school is a connecting link between the school room and the industrial or business world. It keeps in close touch with local industries and opportunities and helps to make school work more practical.

The placement bureau endeavors to place the child in work for which he seems best fitted and which offers the most promising future, even if that means persuading him and his parents to give up a job that offers a higher wage at the beginning. It attempts to keep in constant touch with the child after he has gone to work in order to learn whether he has been suitably placed and to help him adjust himself. Although no general schemes have so far been devised in this country for supervising the child at work, the requirement in some states that a child must secure a new employment certificate each time he changes his job offers opportunity for effective supervision.

Any scheme for placement and supervision of working children should, the bulletin states, include provision for further training through compulsory day-time continuation classes.

RECREATION FOR TEACHERS OF THE HAWAIIAN ISLANDS

DR. HENRY S. CURTIS has made the following recommendations to the superintendent of public instruction:

Many of the schools of the islands are located in places which are not reached by railroads. Few of the teachers own automobiles. In consequence, many of them are almost absolutely isolated and see practically no one except the Oriental children who are coming to their schools. This isolation prevents the teachers from becoming really acquainted with the islands and their problems, and from understanding the lives and experience of their children. It is also the chief cause of homesickness and of early return to the coast on the part of most of the American teachers. Anything that will give the teachers greater opportunity to get about, meet other people and become acquainted with the islands, will make them at the same time more efficient teachers and better satisfied with their work and contented to remain in the islands for a longer period of teaching. It will also enable them to draw their illustrations more largely from objects and work with which the children are actually familiar. It is consequently good policy for the schools, as well as desirable for the teachers, that greater facilities for social life and travel should be found so far as possible. In the interest of more efficient teaching and of happier and healthier teachers, I should recommend:

First: That so far as possible, in all schools where there are three or more resident teachers, that a tennis court should be provided for the use of both teachers and children.

Second: Until such tennis courts are provided, that citizens be requested to allow teachers to make use of their courts.

Third: That efforts be made to see if there are not certain citizens who would be willing that a responsible principal should take her teachers to certain unused cottages at the shore or in the mountains for week-ends.

Fourth: That each of the district teachers' associations about the islands purchase or make one or more tents in order that the teachers may camp out certain week-ends.

Fifth: That the department be asked to throw open to the teachers certain desirable cottages for use by teachers during the summer vacations.

Sixth: That a program of week-end walks, similar to those maintained by mountain clubs in various states be organized by each district association; that each of these walks have a definite objective and a guide; that they should include such things as a visit to a sugar mill, a sugar plantation, a pineapple cannery, a pineapple plantation, and that the teachers be shown through these by experts in these fields. That there be certain trips to the shore, to the mountains, trips to study and collect flowers, shells, seeds and other objects of interest. It is suggested that such trips be organized also for children and that in connection with them a small museum of local interest be installed in each school.

THE SHORTAGE OF HIGH SCHOOL TEACHERS

NOT fewer than fifteen thousand teaching positions in public high schools will be without properly qualified teachers next September, according to estimates made by Mr. A. O. Neal, of the U. S. Bureau of Education. The bureau recently conducted an extensive inquiry among the high schools of the country, and more than 7,000 high schools have written of their needs.

Those schools now employ 65,857 teachers, and they will require 17,275 new teachers in the fall to provide for the normal increase in enrollment and to take the places of those who are leaving the schools for other work. Mr. Neal considers that this proportion fairly represents the general condition in high schools throughout the country, and he estimates that a total of 25,978 places must be filled before the next school term begins.

The visible supply of qualified candidates does not even approach that number. Simultaneously with the inquiry made of high schools, the bureau requested all the colleges and universities of the United States to report the number of persons who would graduate this year, and also the number of those graduates who expect to teach in the high schools. Replies from 323 institutions show that their graduates will number 10,680 men and 9,327 women, and that 1,630 men and 4,742 women will take up the work of high school teaching. On this basis it is estimated that only 10,620 members of this year's graduating classes of all the higher institutions will accept positions in the high schools. The difference, 15,358 places, must be filled in ways that are not now apparent, or that number of classes will be without proper instruction.

It may be possible to induce other graduates to enter the work and some former teachers who have withdrawn may return; but this will mean that higher pay and improved conditions otherwise must be offered. The only alternative is to employ persons below the standard prescribed by experience and general practise. How serious the situation is may be judged by the fact that the threatened shortage is twice as great as the number of teachers in all of New England, and greater than the number of such teachers in New York and Pennsylvania combined.

Mr. Neal advises school boards everywhere to lose no time in strengthening their forces in anticipation of the expected difficulties. Salaries must be raised, and improved conditions must be created, in order to hold as many as possible of the teachers now in the service and to attract desirable recruits. All this must be done, not for the benefit of the teachers, who are evidently able now to care for themselves very well indeed, but for the sake of the children who are the sufferers when good teachers leave the service.

EDUCATIONAL NOTES AND NEWS

DR. FRANK WASHINGTON BALLOU, assistant superintendent of the schools of Boston, was elected to succeed Ernest L. Thurston, as sup-

erintendent of the schools of the District of Columbia on June 27.

DR. JOSIAH H. PENNIMAN was appointed acting provost of the University of Pennsylvania to succeed Dr. Edgar Fahs Smith, who retired from this post on June 30, at a special meeting of the board of trustees.

DR. CLIFTON GRAY was inaugurated as third president of Bates College at the commencement exercises on June 23.

DR. J. F. MESSENGER, professor of education and director of the summer school of the University of Vermont, has been elected dean of the newly established school of education in the University of Idaho, Moscow, Idaho, where he will begin work on September 1.

THEODORE SHANK has been elected superintendent of schools of Moscow, Idaho, and has been made associate professor of education at the University of Idaho.

CAPTAIN GARRY C. MYERS, S.C., director of education at the First Recruit Educational Center, Camp Upton, N. Y., has resigned his position at the Brooklyn Training School for Teachers from which he has been absent on leave during his army service, to accept the position as head of the department of psychology in the School of Education, Cleveland, Ohio.

GEORGE T. SCHOENS, of New York, has been appointed educational adviser to the Nicaraguan government. The sum of $300,000 a year for ten years has been appropriated for the public schools and a national university is planned.

SUPERINTENDENT O. L. REID, of Louisville, Kentucky, was elected superintendent of the Youngstown, Ohio, public schools on June 21. His contract is for three years—the first year at $9,000 and the second and third years at $10,000. While Youngstown is a smaller city than Louisville, it is growing rapidly and is not handicapped by the provision of the Kentucky State Constitution which limits the salaries of superintendents to $5,000. A movement was launched in the Kentucky city by the board of trade and the University of Louisville to work out a school of education in combination with the city normal school and the university. It was planned in this way to overcome the financial difficulties and retain Superintendent Reid in Louisville. The details of this plan had been agreed upon and would have brought the salary of the Kentucky superintendent to $8,000.

SUPERINTENDENT W. W. ANDREW, who has had charge of the Salem, Massachusetts, schools for the past eight years, and Principal John H. Bosshart, of the high school, have presented their resignations.

DR. REINHOLD F. A. HOERNLE has resigned his position as assistant professor of philosophy at Harvard University in order to accept a full professorship at Durham, England.

DR. S. G. HEFELBOWER has resigned the chair of philosophy in Washburn College and accepted a chair in the same subject in Carthage College, Carthage, Ill.

MISS EMMA L. EATON and Miss Mary E. Downing, Boston, on May 24, completed fifty years of teaching at the closing session of the Norcross School. A reception was given to them at which each was presented with $50 in gold. They have been retired on half salary.

MEMBERS of the Harvard board of overseers have been elected, as follows: William Roscoe Thayer, '81, of Cambridge, a writer and historian, and for many years the editor of the *Harvard Graduates Magazine;* Louis Adams Frothingham, '93, of Easton, lawyer and former lieutenant governor of Massachusetts; Barrett Waddell, '77, of Boston, former professor of English at the university and now professor emeritus; Norman Penrose Hallowwell, '97, of Milton, a member of the firm of Lee, Higginson & Co.; Edwin Francis Gay (hon. '18) of New York, recently dean of the Harvard Graduate School of Business Administration, director during the war of the Central Bureau of Planning and Statistics at Washington, and now president of the New York Evening Post Company.

HENRY PENNYPACKER, headmaster of the Boston Latin School, has been appointed

chairman of the committee on admission of Harvard College, succeeding John Goddard Hart.

DURING the months of May and June, Drs. N. L. Engelhardt and F. W. Hart, of the department of educational administration at Teachers College, Columbia University, conducted a school building survey for the Protestant denominations of the city of St. John's, Newfoundland. There is a movement on foot to consolidate the four Protestant denominations in Newfoundland which has separate school systems into one school system for the city. At present, the Church of England, the Methodist Church, the Salvation Army and the Presbyterian Church are maintaining separate school systems. The Roman Catholic Church is also maintaining its own school systems in the city, thus making five separate school systems for the city.

DR. EDGAR F. SMITH, retiring provost of the University of Pennsylvania, after conferring degrees and giving the commencement address, received from Dr. William Pepper, dean of the medical school, the doctorate of medicine, conferred at the special request of the faculty of the school of medicine.

DR. MARION LEROY BURTON has received the degree of doctor of laws from the University of Michigan of which he is president-elect.

AT the commencement exercises of the University of Wisconsin the degree of doctor of laws was conferred upon John Barber Parkinson, vice-president and professor emeritus of the university; upon Magnus Swenson, chairman of the state council of defense and federal food administrator for Wisconsin during the war and chief of mission to northern Europe for American relief commission, and upon Alonzo Englebert Taylor, professor of physiological chemistry in the University of Pennsylvania. The degree of doctor of science was conferred upon Joel Stebbins, professor of astronomy in the University of Illinois.

BATES COLLEGE has conferred the degree of doctor of laws on Cecil C. Jones, chancellor of the University of New Brunswick; of doctor of divinity on James S. Durkee, '97, president of Howard University, and of doctor of pedagogy on Lorenzo E. Moulton, '93, of Auburn, Maine.

YALE UNIVERSITY has conferred the honorary degree of A.M. on Dr. Herbert Edwin Hawkes, of Columbia University, dean of the college.

THE semi-centennial celebration of Iowa State College was held in connection with commencement in June this year, having been delayed nearly two years on account of the war. Four hundred and thirty-five degrees were awarded. No honorary degrees had been given in recent years. Thirteen were conferred in connection with the semi-centennial celebration, as follows: Doctor of science to J. C. Arthur, Purdue University; Alfred Atkinson, Montana Agricultural College; Carleton Roy Ball, Washington, D. C.; Isabel Bevier, University of Illinois; Eugene Davenport, University of Illinois; A. S. Hitchcock, Washington, D. C.; L. S. Klinck, University of British Columbia; John R. Mohler, Washington, D. C.; Wilmon Newell, Gainesville, Fla.; R. A. Oakley, Washington, D. C. Doctor of Engineering to W. C. Armstrong, St. Paul, Minn.; A. P. Davis, Washington, D. C.; Thomas L. Smith, Milwaukee, Wis.

PROFESSOR WILLIAM HENRY SCHOFIELD, head of the department of comparative literature at Harvard University, died on June 25, at the age of forty-nine years.

YALE UNIVERSITY has received from an unnamed graduate a gift of $3,000,000 to the general endowment of the university, contingent upon additional gifts of $2,000,000 by next January, exclusive of those through the alumni university fund. The gift is made to meet increased faculty salaries.

CORNELL UNIVERSITY has received a gift of $500,000 from Mr. August Heckscher, of New York City, for the endowment of research. The income of the fund created by Mr. Heckscher's gift will be used to maintain research professorships and to provide facilities for scientific work.

WESLEYAN UNIVERSITY will benefit to the extent of one million dollars by the will of the late William F. Armstrong, a prominent shipping and export merchant in the city of New Haven. The will, just filed in Brooklyn, N. Y., disposes of an estate estimated at two million dollars. Of this amount $100,000 is bequeathed outright to Wesleyan. After certain other bequests are made the residue of the estate goes to the general endowment fund of Wesleyan University. Mr. Armstrong was not an alumnus of the college and little was known of him there, so the bequest came as a complete surprise to the Wesleyan authorities. The will specified that $25,000 be used for the founding of five scholarship funds and the balance of $775,000 to endow a professorship at the university. In addition to the specified bequest, the university is expected to receive about one million dollars as residuary legatee.

DURING the last few days of the college year students at Iowa State College started a campaign to raise funds for a memorial building for the one hundred and two Iowa State College men and one woman who gave their lives in the war. Fifty-six thousand dollars were subscribed. The campaign will be renewed next year. It will have the strong support of the alumni of the institution. It is hoped to raise over half a million dollars.

A GIFT of $5,000 has been made by Mr. William G. Willcox, former president of the New York Board of Education, to the New York University endowment fund in honor of his father who was a member of the class of 1843.

PREPARATIONS for the opening of the Harvard Graduate School of Education in September include the appointment of the administrative board of the school by the governing board of the university. The board is to consist of Dean Henry W. Holmes and Professors Paul H. Hanus, George E. Johnson, Walter F. Dearborn and Alexander J. Inglis.

A SPECIAL three-weeks course in the methods of teaching the arts in high schools is being given by Dr. James Parton Hanay, director of arts in New York City's high schools, in the summer school of New York University at University Heights. In addition to the thirty lectures on the methods of teaching, the course offers fifteen lectures on the practise of design and forty-five periods of studio work in the development of problems. Several illustrated art talks will be given by Dr. Hanay who will also arrange to visit the Metropolitan Museum with the students each week during the session.

A CLASS of twenty-five teachers has been organized in Louisville, Kentucky, to receive training for the correction of speech defects. Dr. Walter B. Swift, who introduced this work in Boston and Cleveland, is the director of the school. He is being assisted by Miss Netta Farris, principal of the Kindergarten Training School of Cleveland, Ohio, and Miss M. Claudia Williams, of the Board of Education, Cleveland, Ohio. Superintendent O. L. Reid has secured favorable action from the Louisville Board of Education and classes for both white and colored children will be opened in September for the correction of various speech defects.

DISCUSSION AND CORRESPONDENCE

THE DISMISSAL OF PROFESSORS AT THE UNIVERSITY OF SASKATCHEWAN

TO THE EDITOR OF SCHOOL AND SOCIETY: I am enclosing a summary made up of extracts taken from the judgment of three judges of the King's Bench who investigated the dismissal of three professors and the director of extension work from this university. You took notice of this dismissal in a recent issue of your journal. As a matter of justice I think you should publish at least the first paragraph if not more of this summary.

WALTER MURRAY,
President

In August, 1919, the governors of the University of Saskatchewan dismissed three professors and the director of extension work. From this dismissal the four appealed to the lieutenant of the province as visitors. By provincial statute the visitatorial powers are to be exercised by the King's Bench.

Three judges were appointed, and after "an ex-

haustive enquiry of twelve days'' were unanimous in finding that ''the course taken by the president and board was necessary. A state of affairs in the university had been created such as made it impossible that these men should remain any longer in the service of the university. There is no room for doubt on this point, and, indeed, the professors themselves have given public recognition to this fact, for at the close of the hearing they filed their resignations to take effect in case the court should decide to reinstate them in their positions.''

The judgment in reviewing the law states that under the University Act ''it can not be contended that the professors are appointed for life, subject to removal only for expressed impropriety of conduct, because the act provides that, unless it is otherwise provided, their appointment is during pleasure only.''

''Where the appointment is during pleasure no notice is required nor need any hearing be given, because as was said in an old case, King *vs.* Stratford, 1 Lev. 291: 'For it is to no purpose to summon him to answer whom they may remove without a crime.' ''

''If the professor is paid out of the general funds of the university his only remedy is to appeal to the Visitor unless he has an action for damages for breech of contract.''

Following the judgment of Thompson J. in *re* Wilson, 18 N. S. 180, who declared that ''The Visitor is the inspector over those who are governed,'' the Visitor finds that ''All that is necessary for us to consider is whether the provisions of the statute have been complied with. The statute and by-laws having therefore been complied with, we have, in our opinion, no power to interfere with what has been done, unless the president or the governors exercised their discretion of removal in an oppressive manner or from a corrupt or indirect motive.''

The causes for which men holding the office of professor during pleasure may be dismissed are set forth in Gibson *vs.* Ross, 7Cl and F241 Lord Cottenham, L. C. at p. 254, Weir *vs.* Matheson, 3 Upper Canada E. & A., 146, Queen *vs.* Governors of Darlington School, 6 Q.B. 681, see p. 715.

The judgment summarizes the evidence showing the reasons for the removal of the professors from office: ''The trouble commenced with Mr. Greenway making a charge against President Murray to Mr. Dunning, minister of agriculture, of manipulation of funds based on information which had been in Greenway's possession for a very long period, without his taking any action on it. At the same time he charged that only a small number of the faculty were satisfied with the president's administration methods. Mr. Greenway may not have charged that the majority of the faculty were disloyal, but he did charge a want of confidence in President Murray's administrative methods, and in the result the meaning is the same. The evidence shows that each and every one of these charges was untrue and had no foundation in fact, and Mr. Greenway subsequently withdrew them in writing before the board of governors.''

Previous to this the minister communicated to the president the charges of Mr. Greenway. The charge affecting the faculty was reported by the president to the university council, which consists of professors and assistant professors. The council passed a resolution affirming confidence in the president and in his administration and asserting the loyalty of the members of the faculty. Three professors declined to vote and filed reasons for doing so.

The judgment says, ''It is difficult to understand why a man who is loyal to the president of his own institution should fail him at a time of need, or hesitate to vote loyalty to his chief if the loyalty exists. It is to be remembered in this connection that all three of the professors had seen the memorandum which Greenway showed to the minister, which purported to show that Greenway's charges were justified. The written reason signed by the three professors amount to an assertion that the charges of Greenway were such as should be investigated, and, indeed, the position which these three professors took on the question is but little different from that of Greenway himself. When a man undertakes to make charges reflecting seriously on the character of the head of a great public corporation of which he is himself a member, charges which, if proved, show wrongdoing on the part of the president almost of a criminal nature, he takes his professional life, as far as that institution is concerned, in his hands. We consider that the failure to vote confidence in the president's management of the university and loyalty to the president, in the light of the written reasons which were filed, constitute such an open alignment of these professors behind Greenway in the charges he made, that it became essential that their services with the university should be dispensed with in case the charges were not substantiated.''

The board of governors investigated the charges

of manipulation of funds and of the dissatisfaction of the faculty. They asked each member of the faculty for an expression of his satisfaction or dissatisfaction with the administration of the president, and if dissatisfied his reasons for being so. They also asked the dissatisfied to appear before them for the purpose of discussing the matter. The judgment says that the actions of the three with regard to these requests "show a spirit of contumacy to the board and disrespect for their authority."

"Previous to the formal dismissal, the board on becoming convinced that it was necessary that the professors should leave the university, had attempted to have them go without being actually dismissed and without unnecessary publicity, and with a generous allowance both as to leave and to salary. The action of the board at this time was conceived in goodwill and would have enabled these gentlemen to leave the service of the university without damage to their reputation and without injury to the institution. The board had arranged to permit them to resign, and to have a long leave of absence with pay, but the spirit in which these overtures were made was not understood, as we think, unfortunately for all parties concerned."

In conclusion the judges say "We are of the opinion that the recommendation of the president and the proceedings of the board of governors in dismissing Professors . . . were regular, proper and necessary in the best interests of the university, and that neither the president nor the board of governors acted oppressively in the matter nor is there the remotest suggestion of any corrupt or indirect motive and that their decision should therefore be confirmed."

QUOTATIONS

TEACHERS IN THE ENGLISH SECONDARY SCHOOLS

THE standing joint committee on the salaries of teachers in secondary schools now sitting under the chairmanship of Lord Burnham has before it in some ways a more difficult task than that overcome—as we assume from the scales published in our columns to-day—by the committee on elementary salaries. It is true that the present committee has not to deal with a community of teachers so highly organized and persistent as the teachers in the elementary schools, but it has to deal with greater divergency of claims and with a grade of education more important in the future of English education than the elementary schools. It is more true to-day than ever that our future as a nation turns on secondary education. In the past the secondary grade catered for a comparatively small number of children. It is clear that in the early future all children will pass at least into a junior secondary grade, and that elementary education will be replaced by preparatory and junior secondary schools. Lord Burnham's committee has to provide against this vast contingency and to take every possible step to secure teachers who have been trained for secondary school work. This is no doubt a subject which covers more ground than the rules governing the provision of salaries. Much will turn upon the reconstruction of the training colleges with the intention of supplying an ample number of teachers specially trained after a sound liberal education in the work of preparatory and of secondary teaching. Lord Burnham's committee will no doubt keep in mind the fact that the future teachers in secondary schools will in the main be trained teachers holding university degrees, and that in these circumstances substantial salaries will be required to attract and retain the most efficient men and women.

The central organization or standing joint committee entrusted with the task of securing by agreement on a national basis "the orderly and progressive solution of the salary problem" in maintained and aided secondary schools consists of 26 representatives of local education authorities and an equal number or representatives of associations of teachers. The Associations of Head Masters, Head Mistresses and Assistant Mistresses and the National Union of Teachers have respectively five representatives on the committee, while the Association of Assistant Masters has six representatives. Any decision as to salary scales must receive the consent of both sides of the committee. It is proposed to produce a scale or scales by October 31 of this year, and that the local education authorities, whose salary arrangements are below the agreed scale, shall conform to it by a specified date and that

for a specified period the association of teachers will not press or countenance any pressure upon authorities who have adopted the committee scale or an equivalent or better scale for an advance on the agreement. It is further proposed to appeal to the Board of Education in cases where the operation of the agreement is imperilled by the failure of some local education authorities to adopt the scale declared to be locally operative. We do not doubt that there is sufficient sanction or force behind the joint standing committee to secure the adoption of scales both in maintained and aided secondary schools. In both cases the board holds such a dominating position in respect to grants that the possibility of refusal to adopt the scale proposed is almost negligible. We do not feel so satisfied as to the likelihood of securing scales and principles of orderly and progressive increase in salaries which will fill the training colleges, and we feel a good deal of doubt as to the effect of the new proposals on the private secondary schools, and schools not aided by grants.

Efficient secondary schools of a public or private character which are not in receipt of grants form a very important section of our secondary system, and we regret that no proposals are apparently to be made with respect to salaries in those schools. In the case of girls such unaided schools (the Royal School at Bath, of which we publish some account in this issue, is an interesting example) form a substantial part of the present provision for advanced secondary education. To destroy those schools, to destroy as well the important private preparatory schools which in many cases are doing admirable work in supplying large endowed schools with well-trained pupils, would be, at any rate at the present time, disastrous. Yet there can be no doubt that substantial increases of salaries in maintained and aided secondary schools will deprive thoroughly efficient but unaided secondary schools of the bulk of their best teachers. Is there no way out of the difficulty? Is it impossible to preserve the essential elements of freedom and experiment in these schools while providing some means to induce the teachers to remain at their old work? Under section 27 of the Education Act, 1918, the Board of Education has power to inspect free of cost private and unaided schools seeking inspection. Could it not be arranged that in the case of schools so inspected the assistant masters and mistresses in receipt of salaries above a certain reasonable minimum should come under the Superannuation Act, with a number of years of service to their credit to be determined by the inspector's report? If efficient schools of this type are to be preserved, and we believe that their preservation will alone maintain a most important element in a national system, there must be some attraction to retain the teachers which would not exist if their services are transferred to the state. We believe that such a proposal as we have indicated would secure the desired result without impairing the essential freedom of such schools.—*The Times Educational Supplement.*

THE CARNEGIE FOUNDATION'S REPORT ON "THE PROFESSIONAL PREPARATION OF TEACHERS FOR AMERICAN PUBLIC SCHOOLS"[1]

That education for the teaching profession should be placed clearly upon a collegiate footing and organized under a single competent direction as a part of the State University, parallel with medical, legal, engineering, and other similar divisions of higher education, is the conclusion of a comprehensive report on *The Professional Preparation of Teachers for American Public Schools*, just issued by the Carnegie Foundation for the Advancement of Teaching. The report originated in an investigation of teacher-training facilities in Missouri, as requested by the Governor of that state in 1914, but the study of the Missouri situation was found to involve a thoroughgoing examination of the whole teacher-training problem in the United States, and the findings in the Missouri survey are regarded by the Foundation as fur-

[1] Official summary of Bulletin 14, of the Carnegie Foundation for the Advancement of Teaching.

nishing a valuable index to conditions elsewhere.

"What is really needed is not arbitrary distinctions between normal schools and colleges," says the report, "but an enlightened administration of the state's entire teacher-training function exercised from a single directing body equipped to prepare teachers for all schools as thoroughly as possible.

"*Normal* schools should drop that name, and as professional colleges of education should become an acknowledged part of the greater university whole, simply because they are a part of the state's system of higher education, which is all the term *university* now implies. We would thus secure a unified and centralized authority prepared to deal in a constant and efficient manner with the state's largest problem in higher and professional education.

"The aim of each state should be to work toward a situation where the teacher in the elementary and secondary schools shall possess a training that is adequate and a professional recognition that will attract and satisfy the aspirations and the economic needs of able men and women. To open the door to a finer preparation for the life of a teacher, and to put this profession on a plane of the highest honor and dignity, is fundamental to any true progress in education for our country."

"To attain this is only in part a matter of cost and of the teacher's salary. One can not go out in the market with any sum of money, however large, and buy good teaching. An adequate army of sincere, able, and thoughtful teachers can be recruited only from a people who discriminate between that which is sincere and that which is superficial and insincere. Education in a democracy, to serve its real purpose, must be an education of the whole people. The school reacts on the body politic and the ideals of the democracy react on the school. An honest and thorough system of public schools, manned by able and well-trained teachers, can only arise among a people who themselves believe in honesty and thoroughness."

America has consistently neglected the teacher's part in education, according to the report. "Education has been much, on the whole reverently, on our lips," it declares, "but so little have we grasped its purport that the sole factor which can give it reality, namely, the teacher, is grossly ill-equipped, ill-rewarded, and lacking in distinction.

"Marked changes must ensue in our present system of schooling if we undertake to carry out on honest interpretation of our avowed aim of 'universal education' by making it not only universal but also education."

The report makes a strong plea for the married women in teaching, arguing that whatever objections may be urged to married women teachers are outweighed by the obvious advantage of having in educational work the leading women of the community. "There is probably no work to which marriage and a normal home life could contribute a qualification more essential than they could to teaching," it declares. "In an educated and professionally well-trained woman, marriage and the deepening experiences of motherhood could not but serve to clarify her insight, to broaden and humanize her sympathy, and to intensify devotion to her central purpose—a purpose that would then link together and coordinate the processes of both home and school. This latter result would appear particularly in the transformed relation between the school teacher and the community. At present she figures as a detached public servant in a class apart. If married and a householder having children, she becomes a vitally interested and respected factor in society. With an education superior to that of most other women, she possesses, by virtue of her quasi-public position, unusual opportunities for leadership and influence and would undoubtedly improve them. A town whose schools were taught by its most capable and best educated married women would, assuming that these were also well trained for teaching, give the country a totally fresh and significant interpretation of public education. Such a relation would carry the schools straight to the heart of society's most

responsible group, and would make them immeasurably more responsive to the public needs."

Discrimination between high school and elementary teachers is regarded by the authors of the report as one of the most serious difficulties in the way of professional advancement for teachers. They point out that the prestige of a high school instructorship quite outranks that of a "grade" teacher's position in popular respect, and must continue to do so until training and compensation are equalized and the two schools are merged into a single institution.

"To pass from an elementary school position to the high school, as has been possible in small country high schools, or in city schools by securing additional training, is rated as promotion, to the disparagement of the 'inferior' job. Educationally this situation constitutes at present perhaps the greatest single obstacle to progress. As long as the situation requires that a teacher rise by changing his work instead of by capitalizing his experience and improving his work, little genuine progress toward professional efficiency can be realized."

That the public can be made to realize the value of good teaching is the contention of the authors. They say:

> Fine instruction does not at present prevail in American communities simply because it is not understood; the average parent's interest in his child's school is almost imperceptible, not because his interest in his child is not profound, but because the teaching purpose and process has never taken the parent convincingly into its confidence. Parent-teacher associations have rendered an important service by promoting helpful social relations between home and school, but they obviously have not taught how to discriminate between the teaching now provided and the better teaching that might be provided, nor is that their purpose. Here is a field almost completely unworked. Enthusiasm and personal sacrifice to secure good teaching for his children are latent in well-nigh every parent. He must, however, know definitely and vividly what good teaching is, and he must understand clearly that its value is on the whole directly related to its cost. Convince any American public that the alleged products of a fine teacher are real, and the cost will speedily become a wholly secondary consideration.

The authors of the report are: Dr. William S. Learned, of the Carnegie Foundation, who organized and directed the study; Professor William C. Bagley, of Teachers College, Columbia University; Dr. Charles A. McMurry, of George Peabody College for Teachers; Professor George D. Strayer, of Teachers College, Columbia University; Professor Walter F. Dearborn, of Harvard University; Dr. I. L. Kandel, of the Carnegie Foundation; and Homer W. Josselyn, of the University of Kansas.

EDUCATIONAL RESEARCH AND STATISTICS

ARMY ALPHA TESTS AND TEACHERS' ESTIMATES IN HOLLYWOOD HIGH SCHOOL

1. THE EXPERIMENT

A. Teachers' estimates were recorded for 211 seniors in Hollywood High School, February 23, 1920, on the following basis (22 teachers supplied the estimates): 1 Superior, 2 Above Average, 3 Average, 4 Below Average, 5 Inferior. Each pupil was estimated by an average of 5 teachers, and the average of the estimates of each pupil was taken as a basis of computation in the experiment.

B. Army Alpha (Forms 7 and 8) was given February 23 to 180 seniors, and Form 9 on March 9 to the 31 seniors who had been absent in February, total 211.

C. An average was made for each pupil of his marks on his report card, the final semester grade of January 26, in each solid having been used. (In this computation, figures 1, 2, 3, 4, 5, 6, 7, 8, 9 were used instead of the letters A, A—, B+, B, B—, C+, C, C—, D.)

D. The following correlation coefficients were computed by Pearson's formula:

1. Between Army Alpha and Teachers' Estimates, Total Group (211 Pupils).
2. Between Army Alpha and Teachers' Estimates, Group A (72).
3. Between Army Alpha and Teachers' Estimates, Group B (98).
4. Between Army Alpha and Teachers' Estimates, Group C+ (34).

5. Between Army Alpha and Teachers' Estimates, Group C (7).
6. Between Teachers' Estimates and Grades on Cards (211).

2. RESULTS

A. In teachers' estimates, several pupils were given as many as four ratings (2, 3, 4, 5), and many had three ratings (2, 3, 4), so that an average in each case had to be used. Teachers varied much in estimates. Two pupils averaged above 1.5, while three were between 4.2, and 4. The average rating was 2.8. The highest was 1.2, the lowest 4.2. The most common score (mode) was 3 (30 pupils), next being 2.8 (24 pupils).

B. Army Alpha. (In the army there were seven groups on the basis of the Alpha Test, A (Very Superior), B (Superior), C + (High Average), C (Average), C — (Low Average), D (Inferior), D — (Very Inferior).

Men of A intelligence have the ability to make a superior record in college, men of B intelligence can make an average record in college, C + intelligence can not do as well, while C grade is rarely capable of finishing a high-school course.

Among the soldiers the grades were distributed as follows: A, 4 to 5 per cent., B, 8 to 10 per cent., C +, 15 to 18 per cent., C, 25 per cent, C —, 20 per cent., D, 15 per cent.).

We should naturally expect high-school seniors to be a selected group, containing no cases below C, and very few at C +, which was what occurred. The results were as follows:

A.	(Scores 212–135), 72.	Boys 37, Girls 35.
B.	(Scores 134–105), 98.	Boys 38, Girls 60.
C +.	(Scores 104– 75), 34.	Boys 9, Girls 25.
C.	(Scores 74– 45), 7.	Boys 1, Girls 6.

In percentages, the results are as follows:

A. 34.1%, Boys 43. 5%, Girls 27. 7%.
B. 46.4%, Boys 44. 7%, Girls 47. 6%.
C. 16.1%, Boys 10. 5%, Girls 19. 8%.
C. 3.3%, Boys 1.17%, Girls 4.76%.

The highest score was 177 (out of a possible 212), and the lowest was 53. The median score was 127.87, the average 124.32, and the mode (score of greatest frequency) 131.

We find that 5 per cent. of the seniors had scores 177–160, 20 per cent. 159–140, 50 per cent. 140–112, 20 per cent. 111–86, and 5 per cent. 85–53.

C. The average score on report cards was 4.3, representing a grade of B. Highest score was 1 (A), made by a boy, and the lowest was 8 (C), made by one boy and one girl.

D. Correlations.

1. Army Alpha and Teachers' Estimates.
   Group A, $r = .287 \pm .042$.
   Group B, $r = .165 \pm .045$.
   Group C +, $r = -.099 \pm .0045$.
   Group C, $r = .619 \pm .028$.
   Total Group, $r = [428 \pm .038]$
2. Teachers' Estimates and Grades on Cards. $r = .546 \pm .033$.

3. CONCLUSIONS

A. On Correlations.—(Note: According to Rugg, pages 256–257,

r is negligible or indifferent if less than .15–.20
r is present but low if from .15–.20 to .35–.40
r is markedly present, or marked, if from .35–.40 to .50–.60
r is high if above .60.)

Hence we find low correlation in Groups A and B, and Teachers' Estimates, negative correlation in Group C + and Teachers' Estimates, high correlations in Group C, marked correlation in the total group of Army Alpha with Teachers' Estimates, and marked correlation between Teachers' Estimates, and marks on cards.

The correlation between Teachers' Estimates and marks on cards was higher by 11 points than correlation between Army Alpha, and Teachers' Estimates, seeming to indicate that teachers were influenced by the work of the pupils in the school subjects, although not as much as might have been expected.

B. General.—There were several interesting revelations in the Army Test.

1. The boy who has made the highest score (177), and who solved correctly the 20 arithmetic problems in 5 minutes, (Test 2), was

graded 4 by one teacher (4 = below average), and 2 by the others, no teacher giving him 1.

2. One girl who made a grade of 140 in Army Alpha, and was therefore in Group A, was graded 4 by six teachers, and 3 by three teachers.

3. The boy who made the highest score (177) was only 15 years old, while the boy who had next to the lowest score (64) was 21 years old. The lowest score in the whole group was made by a girl (53), 18 years old.

4. In Group C there was only one boy, the other six being girls.

In Group D only 9 out of 34 were boys.

All except 10 of the 85 boys were in Groups A and B.

5. In Group A, 15 pupils were estimated by teachers as less than 3, 4 of them being (3.5)–(3.9).

In Group B, 48 pupils were estimated less than 3, 5 of them being (3.5)–3.9), and 1 being (4)–(4.4).

In Group C+, 11 pupils were estimated above average, 14 were estimated (3)–(3.4), 7 were (3.5)–(3.9), and 2 were (4.)–(4.4).

In Group C, 3 were between (3)–(3.4), 2 were (3.5)–(3.9) and 2 were (4.)–(4.4).

C. Comparison between Boys and Girls in Army Alpha.—Wherever these tests have been given to mixed groups, boys have always proved to have higher scores. There was no exception in the case of Hollywood. An effort was therefore made to discover in which tests boys were sueprior, by ascertaining the average score attained by boys and by girls in each test. The results follow:

Test 1 (Directions)	Boys 9.4, Girls 8.7
Test 2 (Arithmetic)	Boys 11.3, Girls 9.1
Test 3 (Common Sense)	Boys 9.21, Girls 9.29
Test 4 (Same and Opposites)	Boys 22.3, Girls 21.4
Test 5 (Mixed Sentences) ..	Boys 14.5, Girls 15.2
Test 6 (Number Relations)..	Boys 11.1, Girls 9.5
Test 7 (Word Relations) ...	Boys 25.5, Girls 24.4
Test 8 (Information)	Boys 26.1, Girls 22.9
Total:	Boys 129.6, Girls 120.9

Hence we see that boys rank higher in all tests except mixed sentences in which girls win out by .7, and in common sense, in which girls are the superior by .08!

4. *Value of these Conclusions.*—Since the Alpha Test has been given to a million and a half men, and is therefore very well standardized, the above results ought to be of value. They open to us the questions:

(*a*) Are the pupils who are sent to college as recommended, on the basis of Teachers' Estimates, or those who are kept from college, because not recommended, proving that the Teachers' Estimates are the best reliable basis for college recommendation? The correlation between these and the Alpha Test, while fairly good for the total group, is not good for the separate groups, and even in the total group would seem to indicate that any individual teacher's estimate, influenced as it is by all kinds of elements, and not being objective, is not really a fair basis for recommendation or non-recommendation. Several pupils in Groups A and B, all of whom, according to the Army Test, are capable of doing at least average work in college, are marked below average and will not be recommended by the teachers. Is it not possible that we are now keeping from college, and from future success in certain lines of work boys and girls who ought to go to college, and are sending some to whom the college course is not suited (for some of the lower pupils in the Alpha Test are graded high by the teachers)?

b. If the Teachers' Estimates are not the best basis for promotion and recommendation, is not some objective test, like the Army Alpha, well standardized as it is, a better indication of real ability or lack of ability.

c. If the Army Alpha is not the best test for the purpose, is it not a necessity that educators work out tests along these lines, so that there may be an objective basis for the grading of pupils in our schools? If this were done, there would not be so many misfits in after life, when these boys and girls have become the men and women of our nation.

MARY M. WENTWORTH

HOLLYWOOD HIGH SCHOOL,
LOS ANGELES, CALIFORNIA